



Attorney Docket No. 655-012C

THE UNITED STATES PATENT AND TRADEMARK OFFICE

-----X

In re Application of

Examiner:

Tanh Q. Nguyen

Baker et al.

Group Art Unit:

2182

Serial No. 09/777,003

Filed: February 5, 2001

For: INTEGRATED MULTIMEDIA SYSTEM WITH LOCAL PROCESSOR,
DATA TRANSFER SWITCH, PROCESSING MODULES, FIXED FUNCTIONAL
UNIT, DATA STREAMER, INTERFACE UNIT AND MULTIPLEXER, ALL
INTEGRATED ON MULTIMEDIA PROCESSOR

-----X

REPLACEMENT PAGES

Honorable Assistant Commissioner of Patents
Washington, DC 20231

Dear Sirs:

Applicants hereby submit these replacement pages accompanying the Amendment filed

Herewith in response to the Final Office Action dated July 12, 2002.



19. An integrated multimedia system having a multimedia processor disposed in an integrated circuit, said system comprising:
- a first host processor system coupled to said multimedia processor;
 - a second local processor disposed within said multimedia processor for controlling the operation of said multimedia processor;
 - a data transfer switch disposed within said multimedia processor and coupled to said second processor for transferring data to various modules of said multimedia processor;
 - a data streamer coupled to said data transfer switch, and configured to schedule simultaneous data transfers among a plurality of modules disposed within said multimedia processor, at least one of which is a cache memory, in accordance with corresponding channel allocations;
 - an interface unit coupled to said data streamer having a plurality of input/output (I/O) device driver units;
 - a multiplexer coupled to said interface unit for providing access between a selected number of said I/O device driver units to external I/O devices via output pins; and
 - a plurality of external I/O devices coupled to said multimedia processor.

20. The system in accordance with claim 19, wherein said external I/O devices are controlled by a corresponding one of said I/O device driver units.

Replacement page

21. The system in accordance with claim 20, wherein one of said external I/O device is an NTSC decoder.

22. The system in accordance with claim 20, wherein one of said external I/O device is an NTSC encoder.

23. The system in accordance with claim 20, wherein one of said external I/O device is a demodulator unit configured to demodulate wireless communications signals.

24. The system in accordance with claim 23, wherein said demodulator unit communicates with said multimedia processor in accordance with a transport channel interface arrangement.

25. The system in accordance with claim 20, wherein said multimedia processor provides video signals and three dimensional graphic signals to an external video display device.

26. The system in accordance with claim 20, wherein one of said external I/O device is an ISDN interface.

27. The system in accordance with claim 20, wherein one of said external I/O

device is an audio coder and decoder (CODEC) unit.

28. An integrated multimedia system having a multimedia processor disposed in an integrated circuit, said system comprising:

a processor disposed within said multimedia processor for controlling the operation of said multimedia processor;

a data transfer switch disposed within said multimedia processor and coupled to said processor for transferring data to various modules of said multimedia processor;

a data streamer coupled to said data transfer switch, and configured to schedule simultaneous data transfers among a plurality of modules disposed within said multimedia processor, at least one of which is a cache memory, in accordance with corresponding channel allocations;

an interface unit coupled to said data streamer having a plurality of input/output (I/O) device driver units;

a multiplexer coupled to said interface unit for providing access between a selected number of said I/O device driver units to external I/O devices via output pins; and

a plurality of external I/O devices coupled to said multimedia processor.

29. The system in accordance with claim 28, wherein said external I/O devices are controlled by a corresponding one of said I/O device driver units.

30. The system in accordance with claim 29, wherein one of said external I/O

Replacement page

device is an NTSC decoder.

31. The system in accordance with claim 29, wherein one of said external I/O device is an NTSC encoder.

32. The system in accordance with claim 29, wherein one of said external I/O device is a demodulator unit configured to demodulate wireless communications signals.

33. The system in accordance with claim 32, wherein said demodulator unit communicates with said multimedia processor in accordance with a transport channel interface arrangement.

34. The system in accordance with claim 29, wherein said multimedia processor provides video signals and three dimensional graphic signals to an external video display device.

35. The system in accordance with claim 29, wherein one of said external I/O device is an ISDN interface.

36. The system in accordance with claim 29, wherein one of said external I/O device is an audio coder and decoder (CODEC) unit.

Replacement page

37. The system in accordance with claim 19, further comprising a cache memory directly coupled to said first host processor system, said second local processor and said data transfer switch.
